



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-4125

May 13, 2011

Mr. Rafael Flores, Senior Vice President
and Chief Nuclear Officer
Luminant Generation Company, LLC
Comanche Peak Nuclear Power Plant
P.O. Box 1002
Glen Rose, TX 76043

Subject: COMANCHE PEAK NUCLEAR POWER PLANT - NRC TEMPORARY
INSTRUCTION 2515/183 INSPECTION REPORT 05000445/2011010 AND
05000446/2011010

Dear Mr. Flores:

On April 28, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Comanche Peak Nuclear Power Plant, using Temporary Instruction 2515/183, "Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event." The enclosed inspection report documents the inspection results which were discussed on April 28, 2011, with you and other members of your staff.

The objective of this inspection was to assess the adequacy of actions taken at Comanche Peak Nuclear Power Plant in response to the Fukushima Daiichi Nuclear Station fuel damage event. The results from this inspection, along with the results from similar inspections at other operating commercial nuclear plants in the United States, will be used to evaluate the United States nuclear industry's readiness to respond to a similar event. These results will also help the NRC to determine if additional regulatory actions are warranted.

All of the potential issues and observations identified by this inspection are contained in this report. The NRC's Reactor Oversight Process will further evaluate any issues to determine if they are regulatory findings or violations. Any resulting findings or violations will be documented by the NRC in a separate report. You are not required to respond to this letter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/ By David L. Proulx

Wayne C. Walker, Chief
Project Branch A
Division of Reactor Projects

Docket: 50-445

50-446

License: NPF-87

NPF-89

Enclosure:

NRC Inspection Report 05000445/2011010 and 05000446/2011010

w/Attachment: Supplemental Information

cc w/Enclosure:

Distribution via ListServe for Comanche Peak

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Publicly Avail	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sens. Type Initials	DP
SRI:DRP/A	RI/DRP/A	SPE:/DRP/A	DRS/TSB	D:DRPPBA	
JGKramer	BWTindell	DProulx	EARuesch	WCWalker	
DProulx - E	DProulx - E	/RA/	/RA/	DP for	
05/10/2011	05/10/2011	05/10/2011	05/10/2011	05/12/2011	

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U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 50-445, 50-446

License: NPF-87, NPF-89

Report: 05000445/2011010 and 05000446/2011010

Licensee: Luminant Generation Company LLC

Facility: Comanche Peak Nuclear Power Plant, Units 1 and 2

Location: FM-56, Glen Rose, Texas

Dates: March 23, 2011 through April 28, 2011

Inspectors: J. Kramer, Senior Resident Inspector
B. Tindell, Resident Inspector

Approved By: Wayne Walker, Chief, Project Branch A
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000445/2011010 and 05000446/2011010, 03/23/2011 – 04/28/2011; Comanche Peak Nuclear Power Plant, Units 1 and 2 Temporary Instruction 2515/183 - Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event

This report covers an announced temporary instruction inspection. The inspection was conducted by resident inspectors. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

INSPECTION SCOPE

The intent of the temporary instruction is to be a high-level look at the industry's preparedness for events that may exceed the design basis for a plant. The focus of the temporary instruction was to: (1) assess the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats; (2) assess the licensee's capability to mitigate station blackout conditions; (3) assess the licensee's capability to mitigate internal and external flooding events required by station design; and (4) assess the thoroughness of the licensee's walk downs and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. If necessary, a more specific follow-up inspection will be performed at a later date.

INSPECTION RESULTS

The following table documents the NRC inspection at Comanche Peak Nuclear Power Plant performed in accordance with Temporary Instruction 2515/183. The numbering system in the table corresponds to the inspection items in the temporary instruction.

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03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats, committed to as part of NRC Security Order Section B.5.b issued February 25, 2002, and severe accident management guidelines and as required by Title 10 of the Code of Federal Regulations (10 CFR) 50.54(hh). Use Inspection Procedure 71111.05T, "Fire Protection (Triennial)," Section 02.03 and 03.03 as a guideline. If Inspection Procedure 71111.05T was recently performed at the facility the inspector should review the inspection results and findings to identify any other potential areas of inspection. Particular emphasis should be placed on strategies related to the spent fuel pool. The inspection should include, but not be limited to, an assessment of any licensee actions to:

Licensee Action	Describe what the licensee did to test or inspect equipment.
<p>a. Verify through test or inspection that equipment is available and functional. Active equipment shall be tested and passive equipment shall be walked down and inspected. It is not expected that permanently installed equipment that is tested under an existing regulatory testing program be retested.</p> <p>This review should be done for a reasonable sample of mitigating strategies/equipment.</p>	<p>The licensee reviewed operating procedures to identify equipment used to mitigate beyond design basis events. The licensee considered permanent plant equipment available and functional. For non-permanent plant equipment, the licensee tested active equipment and inspected passive equipment. The licensee verified flow through non-permanent plant equipment pumps including the accident mitigation equipment pump and the pump on the fire truck.</p>
	<p>Describe inspector actions taken to confirm equipment readiness (e.g., observed a test, reviewed test results, discussed actions, reviewed records, etc.).</p>
	<p>The inspectors reviewed test results and records and discussed actions with the licensee. The inspectors reviewed procedures and walked down selected equipment related to mitigation of spent fuel damage during beyond design basis events to ensure the equipment was available and functional. The inspectors reviewed procedures and walked down the accident mitigation equipment pump and its support equipment to ensure the equipment was available and functional. In addition, the inspectors reviewed procedures and walked down accident mitigation equipment for alternate instrument power and indication.</p>

	<p>Discuss general results including corrective actions by licensee.</p> <p>The licensee tested active equipment and walked down passive equipment. The licensee was unable to flow test the alternate service water pumps because of ongoing construction activities. The licensee documented the inability to test the pumps in Condition Report CR-2011-003177 and currently plans to flow test the pumps by May 15, 2011.</p> <p>The inspectors observed that some suction hoses listed in the extreme damage mitigation procedure for the accident mitigation equipment pump were not in the designated location or were absent. The equipment in the procedure did not match the operations inventory that the licensee used to walk down the equipment. This observation was documented in Condition Report CR-2011-004919. The licensee currently plans to add suction hoses or revise the procedure as necessary. The inspectors plan to conduct further inspection and document the results in NRC Inspection Report 2011003. The inspectors also observed that some electrical equipment used in the extreme damage mitigation alternate instrument power and indication was absent, however, identical equipment was available in a different location that was proceduralized. The licensee documented this observation in Condition Report CR-2011-004436. The inspectors do not plan to conduct further inspection on this observation because alternate equipment was available and proceduralized.</p>
<p>Licensee Action</p>	<p>Describe the licensee's actions to verify that procedures are in place and can be executed (e.g. walkdowns, demonstrations, tests, etc.)</p>
<p>b. Verify through walkdowns or demonstration that procedures to implement the strategies associated with B.5.b and</p>	<p>The licensee performed a walkdown and reviewed the extreme damage mitigation guidelines, severe accident mitigation guidelines, severe challenge guidelines, severe accident control room guidelines, and supporting abnormal condition procedures. The licensee concluded that the procedures were executable.</p>

<p>10 CFR 50.54(hh) are in place and are executable. Licensees may choose not to connect or operate permanently installed equipment during this verification.</p> <p>This review should be done for a reasonable sample of mitigating strategies/equipment.</p>	<p>Describe inspector actions and the sample strategies reviewed. Assess whether procedures were in place and could be used as intended.</p>
	<p>The inspectors reviewed procedures and performed a walkdown of selected strategies related to mitigation of spent fuel damage during beyond design basis events to ensure the strategy could be used as intended. The inspectors reviewed procedures and performed a walkdown of the accident mitigation equipment pump and its support equipment to ensure the equipment matched the procedure and could be used as intended. In addition, the inspectors reviewed procedures and performed a walkdown of accident mitigation equipment for alternate instrument power.</p>
	<p>Discuss general results including corrective actions by licensee.</p>
	<p>The licensee verified through walkdowns and reviews that the extreme damage mitigation guidelines and the severe accident mitigation guidelines are in place and can be executed. The licensee identified that Severe Accident Guideline 5 did not contain proceduralized instructions to use ventilation chillers X-07, X-08, and X-09 to cool containment. The licensee documented this issue in Condition Report CR-2011-003009.</p> <p>The inspectors observed that the guidance for using the onsite fire truck to draft from Squaw Creek Reservoir was not specific and that the licensee had not trained the fire brigade to draft with the fire truck. The licensee documented this observation in Condition Report CR-2011-005078 and CR-2011-5085. The licensee currently plans to conduct a training needs analysis and revise the procedural guidance. The inspectors plan to conduct further inspection and document the results in NRC Inspection Report 2011003.</p>

Licensee Action	Describe the licensee's actions and conclusions regarding training and qualifications of operators and support staff.
c. Verify the training and qualifications of operators and the support staff needed to implement the procedures and work instructions are current for activities related to Security Order Section B.5.b and severe accident management guidelines as required by 10 CFR 50.54 (hh).	The licensee reviewed training records for extreme damage mitigation guidelines and severe accident mitigation guidelines to ensure that the training of individuals was current. The licensee reviewed the operator training records for the shift manager, shift technical advisor, senior reactor operators, reactor operators, and nuclear equipment operators. In addition, the licensee reviewed records for the emergency response organization positions, maintenance personnel, fire protection personnel and security personnel.
	Describe inspector actions and the sample strategies reviewed to assess training and qualifications of operators and support staff
	The inspectors reviewed training records for extreme damage mitigation guidelines and severe accident mitigation guidelines to ensure that the training of individuals was current. The inspectors performed a walkdown and discussed several strategies with engineering staff and nuclear equipment operators to ensure that the operators knew where the equipment was located, how to operate the equipment and if the procedure could be used as written.
	Discuss general results including corrective actions by licensee.
	<p>The licensee discovered several individuals in the emergency response organization and maintenance organization were not current on extreme damage mitigation guideline training. The licensee documented the condition in Condition Reports CR-2011-003292 and CR-2011-003034 and all individuals were trained.</p> <p>The inspectors verified that the licensee took appropriate corrective actions and all individuals were trained.</p>

Licensee Action	Describe the licensee's actions and conclusions regarding applicable agreements and contracts are in place.
<p>d. Verify that any applicable agreements and contracts are in place and are capable of meeting the conditions needed to mitigate the consequences of these events.</p> <p>This review should be done for a reasonable sample of mitigating strategies/equipment.</p>	<p>The licensee reviewed agreements and contracts for mutual aid and support. In addition, off-site agencies and vendors provided verbal confirmation of their commitment to the agreements.</p>
	<p>For a sample of mitigating strategies involving contracts or agreements with offsite entities, describe inspector actions to confirm agreements and contracts are in place and current (e.g., confirm that offsite fire assistance agreement is in place and current).</p>
	<p>The inspectors reviewed agreements and contracts for mutual aid and support.</p>
	<p>Discuss general results including corrective actions by licensee.</p>
	<p>The licensee verified that all agreements, contracts, and commitments were current and active.</p> <p>The inspectors verified that all agreements, contracts, and commitments were current and active.</p>

Licensee Action	Document the corrective action report number and briefly summarize problems noted by the licensee that have significant potential to prevent the success of any existing mitigating strategy.
e. Review any open corrective action documents to assess problems with mitigating strategy implementation identified by the licensee. Assess the impact of the problem on the mitigating capability and the remaining capability that is not impacted.	<p>The licensee identified that the alternate service water strategy was temporally unavailable because of ongoing construction activities. The licensee documented the inability to test the pumps in Condition Report CR-2011-003177 and currently plans to restore the strategy by May 15, 2011. The licensee has other alternate means to supply the service water system that were unaffected by the condition.</p> <p>The inspectors did not identify any additional open corrective action documents that had significant potential to impact mitigation capability.</p>

03.02 Assess the licensee's capability to mitigate station blackout conditions, as required by 10 CFR 50.63, "Loss of All Alternating Current Power," and station design, is functional and valid. Refer to Temporary Instruction 2515/120, "Inspection of Implementation of Station Blackout Rule Multi-Plant Action Item A-22" as a guideline. It is not intended that Temporary Instruction 2515/120 be completely re-inspected. The inspection should include, but not be limited to, an assessment of any licensee actions to:

Licensee Action	Describe the licensee's actions to verify the adequacy of equipment needed to mitigate a station blackout event.
a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.	The licensee performed a walkdown of procedures for station blackout and extended station blackout. As part of this walkdown, the licensee verified equipment used in the procedures was properly staged and adequate. In addition, the licensee performed a walkdown of the alternate power diesel generators. The alternate power diesel generators are not required by design for coping with a station blackout, but are used as a mitigating strategy.

		Describe inspector actions to verify equipment is available and useable.
		The inspectors performed a walkdown of selected procedures for mitigating station blackout and extended station blackout. The inspectors performed a walkdown of the emergency diesel generators, turbine driven auxiliary feedwater pumps, the alternate power diesel generators, and alternate instrumentation to ensure the equipment was available and useable. The inspectors reviewed the corrective action database for condition reports that could impact the operability of the emergency diesel generators.
		Discuss general results including corrective actions by licensee.
		<p>The licensee concluded that equipment listed in the procedures was properly staged and adequate.</p> <p>The inspectors observed some material condition problems with the alternate power diesel generators. The licensee documented the observations in Condition Report CR-2011-004631. The inspectors do not plan to conduct further inspection on this observation because the material condition problems did not impair the function of the equipment.</p>
Licensee Action		Describe the licensee's actions to verify the capability to mitigate a station blackout event.
b. Demonstrate through walkdowns that procedures for response to a station blackout are executable.		The licensee performed a walkdown and validated that, in the event of a station blackout, procedures associated with power restoration were executable. The licensee verified the procedures could be successfully completed.
		Describe inspector actions to assess whether procedures were in place and could be used as intended.

	<p>The inspectors walked down selected procedures for station blackout and for the alternate power diesel generators. The inspectors verified the procedures could be successfully completed.</p>
	<p>Discuss general results including corrective actions by licensee.</p>
	<p>The licensee concluded that the procedures were executable.</p> <p>The inspectors observed that the available methods for refueling the alternate power diesel generators were not proceduralized and no training was provided to responders. The alternate power diesel generators would need to be refueled to meet their extended station blackout and probabilistic risk assessment mission times and some fuel sources would be unavailable due to the extended station blackout. The licensee documented the observation in Condition Report CR-2011-005399. The inspectors plan to conduct further inspection and document the results in NRC Inspection Report 2011003.</p> <p>In addition, the inspectors observed that the alternate power diesel generators have not been load tested on the permanent plant electrical bus and the alternate steam generator level indication strategy used for extended station blackouts has never been functionally tested. The licensee documented these observations in Condition Report CR-2011-005615.</p>

03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design. Refer to Inspection Procedure 71111.01, "Adverse Weather Protection," Section 02.04, "Evaluate Readiness to Cope with External Flooding" as a guideline. The inspection should include, but not be limited to, an assessment of any licensee actions to verify through walkdowns and inspections that all required materials and equipment are adequate and properly staged. These walkdowns and inspections shall include verification that accessible doors, barriers, and penetration seals are functional.

Licensee Action	Describe the licensee's actions to verify the capability to mitigate existing design basis flooding events.
a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.	The licensee reviewed operating procedures, calculations, and the Final Safety Analysis Report sections related to the design basis internal and external flooding. For external flooding, the station ground level is above the maximum expected external flood, so the licensee chose to walk down systems related to rainwater drainage. For internal flooding, the licensee walked down wall and floor penetrations, floor drains, and watertight doors to ensure that passive equipment was in place. In addition, the licensee reviewed preventative maintenance documents for backwater check valves, sump pumps, and level switches to ensure that active equipment was being properly maintained.
	Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.
	The inspectors reviewed operating procedures, the technical requirements manual, and the Final Safety Analysis Report to determine if the licensee could adequately mitigate external and internal flooding. For external flooding, the inspectors walked down the storm drain system. In addition, the inspectors observed Unit 2 refueling outage work that opened the circulating water system, which is connected to the station reservoir, below the maximum flooding level. The inspectors also observed service water travelling screen replacement activities that used a stop log to keep debris out of the suction of the pumps. For internal flooding, the inspectors walked down selected wall and floor penetrations, floor drains, and watertight doors to ensure that passive equipment was in place. In addition, the inspectors reviewed preventative maintenance documents for drain check valves to ensure that active equipment was being properly maintained.
	Discuss general results including corrective actions by licensee.

	<p>The licensee concluded that the flooding mitigation equipment was adequate, properly staged, tested, and maintained.</p> <p>The inspectors observed that the licensee did not have adequate guidance to prevent external flooding of the turbine and control buildings through an open circulating water system during maintenance. In addition, the inspectors observed that the licensee did not have adequate guidance to prevent debris from overflowing service water stop logs in case of external flooding during travelling screen replacement. The licensee initiated Condition Reports CR-2011-004062 and CR-2011-004354 to document the observations. The inspectors plan to conduct further inspections of these two observations and document the results in NRC Inspection Report 2011003.</p>
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<p>03.04 Assess the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. Assess the licensee's development of any new mitigating strategies for identified vulnerabilities (e.g., entered it in to the corrective action program and any immediate actions taken). As a minimum, the licensee should have performed walkdowns and inspections of important equipment (permanent and temporary) such as storage tanks, plant water intake structures, and fire and flood response equipment; and developed mitigating strategies to cope with the loss of that important function. Use Inspection Procedure 7111.21, "Component Design Basis Inspection," Appendix 3, "Component Walkdown Considerations," as a guideline to assess the thoroughness of the licensee's walkdowns and inspections.</p>	
Licensee Action	Describe the licensee's actions to assess the potential impact of seismic events on the availability of equipment used in fire and flooding mitigation strategies.
a. Verify through walkdowns that all required materials are adequate and properly staged, tested, and maintained.	The licensee performed a walkdown of the fire protection system to ensure that the material condition of the system was acceptable. The licensee also performed a walkdown of the fire response procedures to verify the procedures are executable. The licensee does not have external flood protection equipment because site grade is above the maximum expected flood. For internal flooding, the licensee walked down internal flooding mitigation

	equipment to ensure that the material condition of the equipment was acceptable.
	Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.
	The inspectors performed a walkdown of portions of the fire protection system to ensure that the material condition of the system was acceptable. In addition, the inspectors performed a walkdown of fire response procedures. For internal flooding, the inspectors performed a walkdown of internal flooding mitigation equipment to ensure that the material condition of the equipment was acceptable. Specifically, the inspectors performed a walkdown of selected wall and floor penetrations, floor drains, and watertight doors to ensure that passive equipment was in place. In addition, the inspectors reviewed preventative maintenance documents for drain check valves to ensure that active equipment was being properly maintained. The inspectors reviewed operating procedures, the technical requirements manual, and the Final Safety Analysis Report to determine if the licensee could adequately mitigate external and internal flooding. For external flooding, the inspectors walked down the storm drain system.
	Discuss general results including corrective actions by licensee. Briefly summarize any new mitigating strategies identified by the licensee as a result of their reviews.
	The licensee noted that Comanche Peak Nuclear Power Plant was not designed nor licensed to postulate a fire or internal flood after an earthquake. However, the licensee identified that there were alternate strategies in place to supply water for firefighting activities if the fire protection system was damaged, such as the alternate service water pumps and offsite fire responders. The licensee also identified that there was a light pole near the accident mitigation equipment pump that could fall and damage the pump and that the fire truck was in a non-seismic building. The licensee documented these observations in Condition Report CR-2011-004453.

	<p>The inspectors observed that the lube oil storage building is a potential fire/explosion hazard and is located near the accident mitigation equipment sea-land trailer. The licensee documented this observation in Condition Report CR-2011-005399. The inspectors also observed that the alternate service water pumps were located in a non-seismic building. The licensee documented this observation in Condition Report CR-2011-005615. In addition, the inspectors observed that the licensee has never tested the fire truck pumping from the reservoir. The licensee documented this observation in Condition Report CR-2011-005078.</p>
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EXIT MEETING SUMMARY

On April 28, 2011, the inspectors presented the inspection results to Mr. R. Flores and other members of licensee management. The inspectors acknowledged review of proprietary material during the inspection. No proprietary information has been included in the report.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

R. Flores, Senior Vice President and Chief Nuclear Officer
D. Fuller, Manager, Emergency Preparedness
T. Hope, Manager, Nuclear Licensing
D. Kross, Acting Vice President, Nuclear Engineering and Plant Support
M. Lucas, Site Vice President
J. Taylor, Manager, Technical Support

LIST OF DOCUMENTS REVIEWED

03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
ABN-501	Station Service Water System Malfunction	8
ABN-909	Spent Fuel Pool/Refueling Cavity Malfunction	8
EDMG A.2	Spent Fuel Pool Strategies	0
EDMG-3	AME Pump Operation and Alternate Water Supplies	0
RFO-106	Development and Implementation of Fuel Shuffle Sequence Plans	17

WORK ORDERS

4058673 3643015

CONDITION REPORTS

2011-001974	2011-002928	2011-003034	2011-003037
2011-003038	2011-003059	2011-003177	2011-003292
2011-003414	2011-003482	2011-003633	2011-004919
2011-005078	2011-005085		

03.02 Assess the licensee's capability to mitigate station blackout (SBO) conditions

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
ABN-601	Response to a 138/345 KV System Malfunction	11
DBD-ME-206	Auxiliary Feedwater System	26
ECA-0.0A	Loss of All AC Power	8
ECA-0.0B	Loss of All AC Power	8
ECA-TP-11-001A	Loss of all AC power Recovery Without SI Required and APG Supplying Power	0
EDMG A.4-3	Manual Operate the TDAFW Pump	4
MSM-C0-4313	Auxiliary Feedwater Pump Turbine Maintenance	4
SOP-612	345 KV Switchyard and Relay House	8
SOP-614A	Alternate Power Generator Operation	12
SOP-614B	Alternate Power Generator Operation	11

WORK ORDERS

41466 3419804

CONDITION REPORTS

2011-004436 2011-004544

03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
ABN-907	Acts of Nature	11

WORK ORDERS

4-07-176232-00 4-07-176234-00

CONDITION REPORTS

2011-003596 2011-003597 2011-003637 2011-004062

2011-004354

03.04 Assess the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events

PROCEDURES

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
ECA-TP-11-001A	Loss of all AC power Recovery Without SI Required and APG Supplying Power	0
SOP-614A	Alternate Power Generator Operation	12
SOP-614B	Alternate Power Generator Operation	11

WORK ORDERS

385794 365102

CONDITION REPORTS

2011-004453 2011-005399